

(54) **SYSTEMS AND METHODS FOR
ELECTRONIC DATA STORAGE
MANAGEMENT**

(75) Inventors: **Mark Skiba**, Marina del Rey, CA (US);
Mikhail Ryzhkin, Las Vegas, NV (US)

(73) Assignee: **Storactive, Inc.**, Marina Del Rey, CA
(US)

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Primary Examiner—Tuan V. Thai

(74) Attorney, Agent, or Firm—Christie, Parker & Hale,
LLP

(57) **ABSTRACT**

Systems and methods for improved electronic data storage
management that allow the file system to physically adapt
and optimize to a variety of add-on hardware components
(such as hard disks, removable drives, CD ROM drives, etc.)
while virtually maintaining a stable system configuration
from an application software point of view. The Redirector
presents a virtual view of the file system by providing a
virtual view of logical volumes. Through the use of a
Redirector component, all application program file API's to
the operating system are filtered; if the file, or directory is
redirected, then the call is sent in a modified form to the
operating system to its redirected physical location. The
physical movement of files is accomplished through the use
of a Migrator component. The Migrator makes a copy of the
file, verifies the correctness of the copy, updates the redi-
rector table, and then removes the physical file from its
original location.